

**MAIL TO:**

STATE OF UTAH  
DIVISION OF PURCHASING  
3150 STATE OFFICE BUILDING, CAPITOL HILL  
P.O. BOX 141061  
SALT LAKE CITY, UTAH 84114-1061  
TELEPHONE (801) 538-3026  
FAX (801) 538-3882  
<http://purchasing.utah.gov>

**Request for Quotation**Solicitation Number: **GL5005**Due Date: **10/12/04**

Date Sent: October 5, 2004

Goods and services to be  
purchased:

**AERIAL LIFT DEVICE, TRUCK MOUNTED, ARTICULATED-TELESCOPING, 40 FEET****Please/ must complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		

The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. Please review all documents carefully before completing.

The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes\_\_\_\_\_ No\_\_\_\_\_. If no, enter where produced, etc.\_\_\_\_\_

Offeror's Authorized Representative's Signature	Date
Type or Print Name	Position or Title

**STATE OF UTAH  
DIVISION OF PURCHASING &  
GENERAL SERVICES**

**Request for Quotation**

**Solicitation Number: GL5005**

**Due Date: 10/12/04**

Vendor Name:

Item#	Qty	Unit	Description	Unit Price	Extension
001	1	EACH	AERIAL LIFT DEVICE, TRUCK MOUNTED, ARTICULATED-TELESCOPING, 40 FEET, PER ATTACHED SPECIFICATIONS  DELIVERY DAYS WILL BE A FACTOR IN DETERMINING RESPONSIVE BIDDER.  THIS IS A QUOTE, THEREFORE YOU MAY FAX YOUR RESPONSES BACK TO 801-538-3882	\$	\$

FOR QUESTIONS REGARDING THE SPECIFICATIONS, PLEASE CONTACT PAUL ROTTMANN AT 801-965-4078

FOR BID PROCESSING QUESTIONS, PLEASE CONTACT DAVID GILL AT 801-538-3254

REF RX 810 56300000008  
COMMODITY CODE: 54539

**Ship To:** DEPARTMENT OF TRANSPORTATION  
CENTRAL SHOPS  
4501 SOUTH 2700 WEST  
SALT LAKE CITY, UT 84119

**FREIGHT CHARGES (if applicable)**

SHIPPING POINT AND ZIP CODE	
SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one)  <input type="checkbox"/> Small package/Ground <input type="checkbox"/> LTL(Less than truck load) <input type="checkbox"/> Truckload <input type="checkbox"/> Air <input type="checkbox"/> Other (Please specify) NMFC Class # _____ NMFC Item # _____	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

## REQUEST FOR QUOTATION - INSTRUCTIONS AND GENERAL PROVISIONS

**1. QUOTATION PREPARATION:** (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. Errors may be crossed out and corrections printed in ink or typewritten adjacent and must be initialed in ink by person signing quotation. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as specified. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or equivalent" apply. "Or equivalent" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the vendor lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the quote clearly states it is an alternate, and describes specifically how it differs from the item specified. All quotes must include complete manufacturer's descriptive literature if quoting an equivalent product. All products are to be of new, unused condition, unless otherwise requested in this solicitation. (f) By signing the quotation the vendor certifies that all of the information provided is accurate, that they are willing and able to furnish the item(s) specified, and that prices quoted are correct. (g) This quote may not be withdrawn for a period of 60 days from quote due date. (h) Incomplete quotes may be rejected.

**2. SUBMITTING THE QUOTATION:** (a) The quote must be signed in ink and returned to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 or faxed to (801) 538-3882 by the due date and time. **The "Solicitation Number" and "Due Date" must appear on the outside of the envelope or on the fax cover page.** (b) The state will consider faxed quotes. Faxed quotes are submitted at the sole option and risk of the vendor and must be responsive to all conditions and specifications included in the Request for Quotation (RFQ). Access to state facsimile machine is on a "first come first served" basis and the state does not guarantee the vendor's access to the machine at any particular time. (c) All prices quoted must be both F.O.B. Origin and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the quotation for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION.

**3. SOLICITATION AMENDMENTS:** All changes to this solicitation will be made through written addendum only. Bidders are cautioned not to consider verbal modifications.

**4. PROPRIETARY INFORMATION:** Suppliers are required to mark any specific information contained in their quote which is not to be disclosed to the public or used for purposes other than the evaluation of the quote. Each request for non-disclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any quote will not be considered proprietary. All material becomes the property of the state and may be returned only at the state's option. Quotes submitted may be reviewed and evaluated by any persons at the discretion of the state.

**5. SAMPLES:** Samples of item(s) specified in the RFQ, when required by DIVISION, must be furnished free of charge to DIVISION. Any items not destroyed by tests may, upon request made at the time the sample is furnished, be returned at the vendor's expense.

**6. WARRANTY:** The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will

do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

**7. DIVISION APPROVAL:** Purchase Orders placed, or contracts written, with the State of Utah, as a result of this RFQ, will not be legally binding without the appropriate signature of the DIVISION.

**8. AWARD OF CONTRACT:** (a) **This is an informal quotation which will not be read at a public opening;** however, the information may be publicly reviewed after award. To obtain a copy of this record (tabulation) you may either enclose a stamped self-addressed envelope, or review tabulation in our office. (b) The contract will be awarded with reasonable promptness, by written notice to the lowest responsible vendor that meets the specifications. Consideration will be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this request for quotation. (c) The DIVISION may accept any item or group of items, or overall low quote. (d) The DIVISION has the right to cancel this request for quotation at any time prior to the award of contract. (e) The DIVISION can reject any and all quotes or waive any informality, or technicality in any quote received, if the DIVISION believes it would serve the best interest of the State. (f) Before, or after, the award of a contract the DIVISION has the right to inspect the vendor's premises and all business records to determine the holder's ability to meet contract requirements. (g) Estimated quantities are for quoting purposes only, and not to be interpreted as a guarantee to purchase any amount. (h) Utah has a reciprocal preference law which will be applied against vendors quoting products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, Utah Code Annotated. (i) Multiple contracts may be awarded if the State determines it would be in its best interest.

**9. ANTI-DISCRIMINATION ACT:** The vendor agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also vendor agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

**10. DEBARMENT:** The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.

**11. GOVERNING LAWS AND REGULATIONS:** All state purchases are subject to the Utah Procurement Code, Title 63 Chapter 56 U.C.A. 1953, as

amended, and the Procurement Regulations as adopted by the Utah State Procurement Policy Board. These are available on the Internet at (Revision14 Mar 2003 - RFQ Instructions)  
[www.purchasing.utah.gov](http://www.purchasing.utah.gov)

# STATE OF UTAH

## AERIAL DEVICE, TRUCK-MOUNTED, ARTICULATED- TELESCOPING, 40 FOOT - FOR ONE UNIT.

Revised: September 8, 2004

Commodity Code - 54539000000

### PUBLICATION

This specification is a product of the Utah Department of Transportation, hereinafter referred to as STATE. STATE does not assume nor accept any liability when this specification is used in the procurement process by any other entity.

### PART I: GENERAL CLAUSES AND CONDITIONS

1. The equipment furnished under this specification shall be the latest improved model in current production, as offered to commercial trade, and shall be of quality workmanship and material. The supplier represents that all equipment offered under this specification shall be new, or demonstrator, with less than 50 hours. DISCONTINUED MODELS ARE NOT ACCEPTABLE.
2. Supplier shall submit, with the bid, in duplicate, the latest detailed specifications, as per exhibit A, on the offered equipment. Supplier should submit the latest literature; the literature is for informational purposes only.
3. The units shall be completely assembled and adjusted. All equipment, including standard and supplemental equipment, shall be installed, and the units shall be serviced for continuous operation.
4. All parts not specifically mentioned, but are necessary for the units to be complete and ready for operation, or which are normally furnished as standard equipment, shall be furnished by the supplier. All parts shall conform in strength, quality and workmanship to the accepted standards of the industry.
5. The units provided shall meet or exceed all Federal and State of Utah safety, health, lighting and noise regulations and standards in effect, and which are applicable to equipment furnished, at the time of acceptance.
6. It is the intent of STATE to purchase goods, equipment and services having the least adverse environmental impact, within the constraints of statutory purchasing requirements, departmental need, availability, and sound economical considerations. Suggested changes and environmental enhancements for possible inclusion in future revisions of this specification are encouraged.
7. STATE encourages all manufacturers to voluntarily comply with the Society of Automotive Engineers' (SAE) recommended practices.
8. Measurements will be given in the English system.
9. Failure to provide and comply with Part I of bidder-submitted specifications will result in bid(s) being declared non-responsive.

### PART II: SPECIFICATIONS

1. **SCOPE:**  
This specification describes a aerial device, truck-mounted, hydraulically powered, elevating and rotating, personnel work device. Units shall safely lift the required capacity to the heights specified in applications such as overhead sign maintenance, safety lighting maintenance, traffic signal maintenance, etc. The specification is inclusive of telescoping, articulating, and articulating over center-type booms. If a particular boom type is required, it will be specified on the Invitation For Bids (IFB). The aerial device shall be complete, assembled, mounted, serviced, tested and certified in accordance with the latest revision of the American National Standard Vehicle-Mounted Elevating and Rotating Aerial Devices ANSI/SIA A92.2 on the vehicle specified on the IFB. Units furnished to these specifications shall meet or exceed all the following requirements:

EXAMPLE: Duralift DPM-40  
Terex TL 41-M  
Versalift VST-240  
or STATE approved equal.

#### **NOTICE TO BIDDERS:**

Any example shown is listed to show type and class of equipment desired. Bidders are cautioned to read the specifications carefully, as there may be special requirements not commonly offered by the equipment manufacturer. Do not assume your standard equipment meets all detailed specifications merely because it is listed as an example. Bidders are cautioned that units delivered to the FOB points which do not meet specifications in every aspect will not be accepted.

2. **ANSI:** Units meeting this specification shall be in compliance with the latest revision of "American National Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices". Requirements contained in this specification that were extracted from the ANSI publication will be cross-referenced with the initials "ANSI" and the appropriate paragraph numbers for the bidder's convenience. The vendor shall remain responsible for ensuring all ANSI requirements are met.
3. **DEVICE CAPABILITIES**

3.1 **BUCKET HEIGHT:** The bucket height shall be a minimum 39 feet 8 inches as specified on the IFB, measured at maximum elevation of the device, from the floor of the bucket to the ground with the device mounted on the vehicle as

## Specification: Aerial Lift

specified on the IFB. Extensions, spacers, inserts, etc., shall not be installed on this aerial device solely for the purpose of meeting height requirements. Any other type spacer that is a standard feature of the design of the aerial device shall not exceed eight inches in height.

3.2 REACH: The reach of the device shall be measured from the center line of the pedestal to the outer edge of the bucket. Units shall have a reach of at least 26 feet at a bucket height of 16 feet.

3.3 CAPACITY: The rated capacity of the units shall be a minimum 300 pounds, unless otherwise specified on the IFB. The rated capacity shall be designated with the boom(s) extended to the position of maximum overturning moment attainable throughout full rotation of its pedestal.

### 3.4 JIB & WINCH:

3.4.1 Shall have material handling jib-and-winch consisting of a platform shaft mounted jib-pole and winch.

3.4.2 Jib shall be constant in any non-over-center boom position.

3.4.3 Shall have 750 lbs. minimum capacity.

## 4. STABILITY REQUIREMENTS

4.1 LEVEL GROUND: The device, when mounted on the truck as specified, shall sustain a static load one and one-half times its rated load capacity, in every position in which the load can be placed within the definition of the specific configuration, when the units are on a firm and level surface. If stability-assist equipment such as torsion bar is part of the definition of the configuration, they shall be put into use for the purpose of determining whether the units meet the stability requirements.

4.2 SLOPES: The device, when mounted on the truck as specified, shall sustain a static load one and one-third times its rated load capacity, in every position in which the load can be placed within the definition of the specific configuration when the vehicle is on a slope of five percent downward in the direction most likely to cause overturning. Stability-assist equipment, torsion bar shall be put into use for the purpose of determining whether the units meet the stability requirements.

### 4.3 TORSION BAR(S):

Units shall be equipped with torsion bar stabilizer(s) mounted to the chassis to prevent excessive tipping and spring compression with the device in working position to the side of the truck. Torsion bar(s) installed shall be of the quantity, size and type recommended by the manufacturer of the aerial device.

### 4.4 OUTRIGGERS

4.4.1 The units shall be equipped with a minimum of two each "A" or "H" type outriggers.

4.4.2 Outriggers shall be telescoping and self-locking.

4.4.3 Outriggers shall be hydraulically operated with double-acting cylinders and shall be individually controlled to permit leveling of the truck on moderately sloping surfaces. The hydraulic system must be equipped with manual shut-off or diversion valve(s) to prevent inadvertent operation of the outriggers when the boom is aloft.

4.4.4 Outrigger spread at full extension shall not exceed 144 inches.

4.4.5 Outriggers, when fully retracted, shall have a minimum 12 inches ground clearance.

## 5. PERSONNEL BUCKET:

5.1 Bucket shall be of fiberglass construction and fully enclosed on the sides and bottom.

5.2 Bucket shall have an insulated, positive-type self-leveling system that will cause the bucket to automatically assume and hold a level position as the boom elevation varies. (Gravity or pendulum type leveling is not acceptable.)

5.3 Bucket size shall be for one person with minimum dimensions of 24 inches by 30 inches by 42 inches deep.

5.4 Bucket shall have a molded exterior step or steps for entering the bucket from the truck bed, or be designed to provide easy entrance into the bucket by other means.

5.5 Buckets shall be equipped with a removable weather-tight cover of plastic or similar type fabric.

5.6 Bucket shall be accessible from the ground.

5.7 Shall have hydraulically driven bucket rotation minimum of 180 degrees rotation.

## 6. BOOM AND PEDESTAL: Units will be equipped with an articulate, telescopic, elbow boom design.

6.1 LOWER BOOM: The lower boom or section shall be constructed of steel not to exceed vehicle width of mirrors when rotated.

6.2 UPPER BOOM: Upper boom or section shall be constructed of fiberglass and shall be electrically insulated and certified to the requirements of the latest revision of ANSI/SIA, Class "C".

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- 6.3 PEDESTAL: The pedestal furnished shall be the standard design for the aerial device model bid. Pedestal shall be mounted in the manner recommended by the manufacturer. Mounting shall provide for a minimum of overhang of the device on both the front and rear of the truck.
- 6.4 BOOM ROTATION: The device shall rotate 360 degrees in either direction. Continuous rotation is acceptable but not required.
7. HYDRAULIC SYSTEM: Power for elevation, extension, rotation and related movements of the device shall be by means of a complete hydraulic system.
  - 7.1. An SAE power take-off assembly on the truck transmission shall power the hydraulic pump(s).
  - 7.2. System shall include all necessary hoses, fittings, connectors, reservoir, cylinders, (cylinders with double-acting holding valves, no chains or cables) filter and other items necessary for operation.
  - 7.3. Hydraulic system shall be equipped with the appropriate devices to prevent free and unrestricted motion of the aerial device to include boom(s) and bucket leveling system as provided in the event of hydraulic failure.
    - 7.3.1 The units shall be equipped with an emergency power system to provide back-up power in case the truck engine fails and the hydraulic system is inoperable. The system shall consist of a 12-volt DC electrical pump, which operates off the truck battery to safely lower the bucket and operator. Controls shall be at the bucket and pedestal.
    - 7.3.2 The aerial device shall have easily accessible reducing valves to bleed off hydraulic pressure and safely lower the bucket and pedestal in the event of the failure of both the truck engine and electrical system.
8. CONTROLS: Controls shall be feather type, furnished at the bucket and pedestal for controlling all movements of the device.
  - 8.1 Pedestal controls shall override the bucket controls and provide full metering for gradual movement of all functions.
  - 8.2 Bucket control lines shall be permanently installed in the interior of the boom.
    - 8.2.1 Bucket and pedestal controls shall be insulated and provide full metering for gradual movement of all functions.
    - 8.2.2 Bucket and pedestal controls shall automatically assume a neutral or off position when released by the operator to automatically stop the motion of the device.
  - 8.3 Insulated return to neutral type controls to start and stop the truck engine shall be provided at the bucket. An engine throttle control shall also be provided if the aerial device is equipped with an open-center-type hydraulic system.
9. MARKINGS: The aerial device shall include, but not be limited to the following legible, permanent markings readily visible to the operator:
  - 9.1 IDENTIFICATION MARKINGS: The manufacturer shall install markings indicating the following: make, model, serial number, rated load capacity, bucket height, and aerial device system pressure or aerial device system voltage, or both.
  - 9.2 OPERATION MARKINGS: The manufacturer shall install markings describing the function of each control.
  - 9.3 INSTRUCTION MARKINGS: The manufacturer shall install markings which indicate hazards inherent in the operation of an aerial device, and those hazards for which the aerial device does not provide protection. These markings shall include:
    - 9.3.1 Electrical hazard markings cautioning that the aerial device does not provide protection to the operator from contact with or proximity to an electrically charged conductor when the operator is in contact with or in proximity to another conductor. These shall include weather-resistant markings (signs) of not less than 5 inches (127 mm) by 7 inches (178 mm) with a yellow background and black lettering reading as follows: "WARNING-UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN TEN FEET OF HIGH VOLTAGE LINES." These must be legible at 12 feet and placed as follows:
      - 9.3.1.1 On the equipment, readily visible to the operator(s) at each control station.
      - 9.3.1.2 On the outside of equipment in such number and location as to be readily visible to other persons engaged in the work operations from all sides of the vehicle.
    - 9.3.2 Electrical hazard markings cautioning that the aerial device, when working on or in proximity to energized conductors, shall be considered energized, and that contact with the aerial device or vehicle under those conditions may cause serious injury. The markings shall also warn that there is no protection from phase-to-phase situations.
    - 9.3.3 Hazards that may result from improper or non-prescribed use of the aerial device.
    - 9.3.4 Information concerning the use and load rating of the equipment for material handling.
10. TRUCK BODY: The truck shall be equipped with a low silhouette body designed for general utility work and suitable for mounting on a truck chassis having dual rear wheels and meeting the latest revision of ANSI Sections 6 and 7. The body shall

## Specification: Aerial Lift

be treated for resistance to rust and corrosion prior to being painted. The body requirements, which follow, are listed for a 84-inch cab-to-axle dimension. The cab-to-axle dimension for the furnished vehicle shall be contained in the current General Services Commission (GSC) Utah Automobile and Truck Specification, or will be specified on the IFB.

- 10.1 Body length 132 inches, minimum.
- 10.2 Both sides shall be equipped with two full-height, vertical compartments for the body 84-inch cab-to-axle. These compartments shall be forward of the rear wheels.
- 10.3 Both sides shall be equipped with a minimum of one full-height vertical compartment behind the rear wheels, 22 inches wide.
- 10.4 Both sides shall be equipped with one horizontal compartment over the rear wheels, approximately 46 inches wide.
- 10.5 Compartment doors shall have recessed handles with slam-action latches, and all locks keyed alike.
- 10.6 Each vertical compartment shall have two adjustable shelves, and the horizontal compartments shall have material drawers with dividers.
- 10.7 Body shall be equipped with a full-width, wrap-around, tread plate, step type rear bumper with recessed area for license plate installation. Extension of the body floor or bumper extension for entrance into the bucket is permissible, if design of the device as advertised by the manufacturer requires this feature.
- 10.8 Shall have hitch receiver with frame reinforced for towing.
- 10.9 A tread plate of minimum 1/8-inch (3 mm) diamond pattern steel plate shall be provided on the top of both side compartments.
- 10.10 Vertical grab handles approximately 20 inches (508 mm) long shall be provided at top rear on each side.
- 10.11 A boom rest, if necessary, shall be located and securely mounted to the manufacturer's recommendation, to hold the boom in the lowered position while traveling.

**BIDDERS NOTE** IF INSTALLATION OF THE AERIAL DEVICE INTERFERES WITH THE UTILITY BODY OR CONFIGURATION PER THE ABOVE, SUPPLIER SHALL COORDINATE FINAL CONFIGURATION WITH STATE.

## 11. INSTALLED EQUIPMENT ELECTRICAL SYSTEM:

- 11.1 Vendor shall furnish a Power Distribution Center (PDC) independent of the chassis OEM electrical system, for all added equipment electrical wiring. PDC shall include as a minimum:
  - 11.1.1 Covered junction box furnishing individual protected circuits for all non-chassis equipment ordered.
  - 11.1.2 Excess capacity for a minimum of two additional circuits to be added at a later date.
  - 11.1.3 A back-lit switch panel shall be furnished.
- 11.2 Under no circumstances shall added equipment be wired into the main chassis fuse box.
- 11.3 All electrical wiring shall be insulated and enclosed in fibrous loom, plastic loom or flexible conduit for protection from external damage and short circuits. Wiring shall be securely fastened at sufficient intervals to prevent sagging and insecure clearance of mechanical parts. Routing of the wiring through the sub-frame, deck, etc., shall not interfere with the normal operation, nor present a safety hazard. A sealed, splice-free modular wiring harness is acceptable. Rubber grommets shall be used wherever wires of harness pass through metal.
- 11.4 STATE will install safety lighting (Bar lights or strobes).
- 11.5 A flashing warning light mounted in the cab, and illuminated whenever the device is not fully lowered and stored in the traveling position, shall be provided.

## 12. HOUR-METER: Shall be one of the following dash mounted hour-meters for engine;

- 12.1 Vehicle OEM in-dash standard hour-meter.
- 12.2 Hour-meter, electric, quartz type, shock proof, totally sealed case, with readout up to 9,999.9 hours. Shall be three screw or flush mount with system voltage between 10-32V.  
EXAMPLE: Hobbs Model 85001-02, or STATE approved equal.

## 13. Cab and Chassis:

- 13.1 Truck shall be:
  - 13.1.1 OEM Cab
  - 13.1.2 17,500 G.V.W. rating
  - 13.1.3 Auto Trans -P.T.O. provision
  - 13.1.4 Diesel engine-6.L
  - 13.1.5 84" CA, minimum
  - 13.1.6 Minimum Top Speed of 75 M.P.H.
  - 13.1.7 Minimum 35 Gallons fuel tank



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Example:

Ford F550 series

Diesel 6. Liter

Auto transmission with P.T.O. provision

164" WB

84 CA.

4.88 axle ratio

13.2 Truck shall have the following:

- 13.2.1 Speed control
- 13.2.2 Air conditioning
- 13.2.3 Aux power point
- 13.2.4 Front tow hooks
- 13.2.5 Tilt Steering
- 13.2.6 Heavy duty alternator
- 13.2.7 AM / FM radio
- 13.2.8 Hour- Meter (as per section 12)
- 13.2.9 All standard features
- 13.3.10 Cloth seat

13.3 Frame of truck shall be reinforced as necessary, and a clear frame rail for mounting a utility box is preferred.

13.4 **NOTE:** No equipment mounted shall be welded to the vehicle frame at any point between the front of the front spring hanger and the rear of the rear spring hanger. All holes for bolting must be drilled in the chassis manufacturer's accepted manner, and the burning of said holes shall not be acceptable under any condition. Furthermore, no holes shall be drilled in top or bottom flange of truck frame unless drilling is confined to the section behind the rearmost attachment of the rear spring hangers or for preformed factory-made frame-rail bolt holes for subsequent body installation. Welding or torch cutting shall be confined to "boxing" the rear end of the truck frame. All such work shall be confined to area behind rear spring hangers. Chassis frame rivets shall not be removed or cut flush with frame for any reason.

14. **PAINTING:** The units shall be painted the same color as the truck chassis, with lead free paint, except for glass, rubber and those metallic accessories or fixtures constructed of rust-resistant or plated material not normally painted.

15. **MANUALS:** Two copies of manuals with latest revision(s) of ANSI/SIA A92 shall be delivered with each unit. These manuals shall include, but not be limited to, an illustrated parts book, operator's manual and service manual. These also shall include, at minimum, all appropriate manuals for the device hydraulic system, controls and electrical system.

15.1 Additionally, two sets of complete wiring and hydraulic schematics shall be delivered with each unit. All schematics shall be clear, legible and indicate the location of each component. Hydraulic schematics shall include the diameter and length of each hose, and the manufacturer and part number of each fitting.

15.2 The manuals and schematics supplied shall provide complete and comprehensive information on all equipment, equipment components and accessories, as supplied to comply with this specification. If changes, modifications, additions or alterations of any kind are made on the equipment, the vendor shall provide blueprints, line drawings and descriptive text sufficient to allow a person of average skill in general mechanics to diagnose, repair and maintain the equipment and all components.

15.3 On equipment assembled from manufactured components, parts manuals shall show the manufacturer of each part and all cross referencing between the vendor and the manufacturers.

15.4 The operator's manual shall include detailed instructions on the proper method of operation of the units, load/stability requirements, and electrical safety instructions, to include proper use of the grounding kit. Necessary warnings and safety precautions shall be included.

15.5 The following additional information shall be provided by the vendor, at time of delivery, if it is not included in the manuals required above.

15.5.1 Manufacturer's recommended service, preventive maintenance and overhaul intervals.

15.5.2 Recommended fluids, lubricants and their SAE equivalents.

16. **INSTRUCTION ON SAFETY, OPERATION AND MAINTENANCE:** The vendor shall provide the services of a competent, factory-trained, technician thoroughly trained in the use and operation of the units offered to STATE.

16.1 A minimum of eight hours of instruction on safety, operation and preventive maintenance of the units, as required by ANSI 8.12 after the machine has been delivered and is ready for operation but prior to payment..

16.2 **LESSON / AGENDA PLAN:** The supplier shall furnish a copy of the unit manufacturer's approved lesson / Agenda plan for the instructional training required, within 30 days after award of the purchase order. The lesson plan may be taken from the operator's manual, provided all necessary information is included.

- 16.2.1 Operating procedures per operating manual.
- 16.2.2 Break-in procedures
- 16.2.3 Equipment limitations.
- 16.2.4 Operator maintenance.

#### Specification: Aerial Lift

- 16.2.5 Before operations checks and lubrication.
- 16.2.6 Safety.
- 16.2.7 Potentially hazardous – working around the vicinity of high voltage lines.
- 16.2.8 Electrical safety - proper grounding procedures for vehicle.
- 16.2.9 Cold weather operations.
- 16.2.10 Jump-starting.
- 16.2.11 Welding on equipment.
- 16.2.12 Towing or transporting equipment.
- 16.2.13 Instruments and controls.
- 16.2.14 Gauge interpretation.
- 16.2.15 Equipment operation, Do's and Don't
- 16.2.16 Attachment operation, Do's and Don't

#### 17. INSPECTIONS, CERTIFICATIONS AND SAFETY EQUIPMENT

- 17.1 SAFETY INSPECTION: The vendor shall have the units inspected in accordance with either the United States Department of Transportation or the State of Utah motor vehicle laws (as indicated by the Gross Vehicle Weight Rating of the units(s) cab and chassis.). A certified inspection station shall conduct the inspection, and the units shall have the inspection certificate properly affixed at time of delivery.
  - 17.2 ANSI CERTIFICATION AND DOCUMENTATION: The aerial device described above shall be complete, assembled, mounted, serviced, tested, and certified on the vehicle described in the IFB. Complete units(s) shall be furnished. Each unit shall be composed of an aerial device mounted on a truck chassis and shall include any additional options or special equipment specified. The aerial device shall be delivered in full compliance with all applicable ANSI and OSHA standards, rules, and regulations. A corresponding inspection sticker shall be affixed. A test report noting any discrepancies identified along with the corrective action taken and the date performed, and stating the results of a dielectric test and stability test performed on the delivered units will be provided. If there are any repairs made at the time of inspection, a completed work order describing the repair shall be included with the report. All paperwork shall be signed and dated by a certified aerial device inspector.
  - 17.3 MANUFACTURER'S STATEMENT OF ORIGIN AND LINE SETTING SHEET: A Manufacturer's Statement of Origin (MSO) and line setting sheet covering the components of each cab and chassis provided shall be furnished by the supplier.
  - 17.4 WHEEL CHOCKS: Two each shall be delivered with each unit. The size and quantity shall be as recommended by the manufacturer for a service life of five years minimum. Wheel chocks shall be stored in receptacles located under the body near the rear wheels.
18. REPLACEMENT FILTERS: A complete set of replacement filter elements shall be provided for units furnished to these specifications. This set of filter elements shall include air, fuel, oil, and hydraulic filters used on the equipment. Each filter shall be labeled with the equipment manufacturer's part number as shown in the manufacturer's parts book and shall be furnished at the time of delivery. The attached Filter Identification Form should be completed and submitted in duplicate for informational purposes only.

#### **PART III: DELIVERY, ACCEPTANCE AND PAYMENT**

- 1. DELIVERY REQUIREMENTS: Delivery of all equipment on this order shall be completed within the number of days bid. Any units not delivered within this time frame may be canceled from the purchase order or, at State's option, an extension may be granted, whichever is in State's best interest.
  - 1.1 If any units are canceled for non-delivery, the needed equipment may be purchased elsewhere and the vendor may be charged full increase, if any, in cost and handling.
  - 1.2 Unless a delivery extension is granted for acceptable reasons due to circumstances beyond the vendor's control, liquidated damages of \$20.00 will be deducted from the invoice for every working day after the expiration of the number of days shown on the purchase order until the units are delivered. This provision is not intended as a penalty but as liquidated damages.
- 2. STATEMENT OF INTENT: It is the intent of U.D.O.T. that equipment be delivered in full compliance with the specifications.
- 3. ACCEPTANCE INSPECTION: All equipment ordered with this request will be subject to acceptance inspection and performance testing upon receipt. Acceptance inspection and performance testing will not take more than five working days, weather permitting. The vendor will be notified within this time frame of any units not delivered in full compliance with the purchase order specifications. If any units are canceled for non-acceptance, the needed equipment may be purchased elsewhere and the vendor may be charged full increase, if any, in cost and handling.
- 4. WORKING DAY: A working day is defined as a calendar day, not including Saturdays, Sundays, or regularly observed state and federal holidays.

#### **PART IV: TERMS of WARRANTY**

The units of equipment shall be warranted against all defects in material and workmanship for a period of not less than 12 months or 1,200 hours of use, whichever comes first, and shall cover 100 percent parts and labor for the units. If manufacturer's standard warranty exceeds 12 months or 1,200 hours, then the standard warranty period shall be in effect. The warranty begins on the date the units is determined to meet specifications and is accepted into STATE'S fleet.

#### Specification: Aerial Lift

1. During the warranty period the vendor will be responsible for labor, materials, and other costs, as outlined below, associated with required warranty repair. It is the intent of this warranty that the vendor perform warranty repair work. At STATE'S option, STATE may perform minor warranty repairs to the units at the vendor's expense.
2. **EXCLUSIONS:** STATE will assume the expense for replacement tires and tubes, tire repairs, lubricating oils, hydraulic fluids, greases, filters, fuel, antifreeze, batteries, lights, hoses, belts, cleaning, painting and other minor items normally consumed in day-to-day operations. STATE will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.
3. **EQUIPMENT MAINTENANCE:** It is STATE'S policy to maintain the equipment in accordance with the manufacturer's published recommendations.
4. **MINOR WARRANTY REPAIRS:** It is the intent of this warranty that the vendor perform minor warranty repairs; however, at STATE'S option, warranty repairs deemed by STATE to be minor in nature may be performed by STATE at the vendor's expense. Parts required for repairs, which are to be made by STATE, when readily available, will be OEM parts and obtained from the vendor at no cost to STATE.
  - 4.1 **Labor:** Labor for warranty repairs will be calculated at the composite rate for the mechanic in effect at the time of the warranty repairs. Labor rate will not exceed \$40.00 per hour. The time allowed for each repair will be determined by the manufacturer's standard time schedule. Manufacturer's time schedule shall be furnished to the receiving district with the units at the time of delivery (if available). If a manufacturer's time schedule is not available, the actual time for repairs, as noted above, will be used.
  - 4.2 **Warranty Repair Claims:** Warranty repairs will be accumulated on STATE repair orders and will be billed from same, unless the vendor prefers to have claims processed on the vendor's standard forms.
  - 4.3 **Parts:** Replaced parts will be held thirty calendar days and will be available for inspection by the vendor or authorized representative. Copies of invoices for all parts will be provided to the vendor. The cost of parts other than those furnished to STATE at no cost by the vendor will be billed at actual cost.
  - 4.4 **Billing and Payment for Warranty Repair Expenses:** Costs for minor warranty repairs will be accumulated, including labor and replacement parts (if not provided). Reimbursement payment must be made within thirty calendar days of the billing date.
5. **MAJOR WARRANTY REPAIRS:** When major warranty repairs are required, STATE will notify a representative of the vendor's Utah dealer by telephone at the location and the telephone number designated by the vendor on the data sheet as the point of contact. Major warranty repair work for the purpose of this specification means major repairs to the hydraulic and electrical system and major repairs to any other components of the units. Diagnosis of the actual repairs required will be the responsibility of the vendor. The units will be made available at a STATE facility within a 100-mile (160.93 km) radius of the FOB point shown on the purchase order. The repair work may be performed by the supplier or his authorized representative.
  - 5.1 At the supplier's option, the units may be taken by the supplier to a commercial repair facility. If so, the vendor will be responsible for the cost of the round-trip transportation of the units to and from that location.
  - 5.2 If mutually agreed upon between the Contractor and STATE, STATE may transport the units to the vendor's location or authorized repair facility (within the boundaries of the state of Utah). The cost of equipment and manpower necessary to haul the units for the round trip will be billed back to the vendor at the rental rate of the equipment and composite hourly rate for the driver in effect at the time for the equipment required. The composite hourly rate for the driver will not exceed \$25.00 per hour. Rental rate for the truck and trailer will not exceed \$11.00 per hour for the truck and \$3.00 per hour for the trailer.
  - 5.3 **Response Time:** Warranty repair action shall begin within two working days after notification is made to the vendor for need of warranty repairs. A representative of the vendor's Utah dealer will be notified by telephone at the location and telephone number designated by the vendor on the data sheet as the point of contact. The vendor shall notify STATE immediately of any changes in this location and/or telephone number. The warranty repairs should be completed and the units returned to STATE. (or picked up by STATE at the supplier's expense as outlined above) within a reasonable period of time. For the purpose of this specification, eight working days is defined as a reasonable period of time. Excessive delays incurred for the performance of warranty repairs by the vendor may adversely affect the vendor's status as a qualified bidder.
  - 5.4 **Billing and Payment for Warranty Repair Expenses:** Costs will be accumulated for transportation of the units by U.D.O.T. to the vendor's location or authorized repair facility. Payment for transportation costs as provided for in this section must be made within thirty calendar days of the billing date.
6. **PARTS AND SERVICE:** The manufacturer of the equipment furnished shall have an authorized, stocking dealer within the state of Utah. The authorized dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts.

Specification: Aerial Lift

AERIAL DEVICE, TRUCK-MOUNTED, ARTICULATED OR TELESCOPING - 40 FOOT

**EXHIBIT A: - Example of Detail Specification:**

Supplier shall insert or attach the requested information and return copy with IFB.

TRUCK DATA:

Truck: Make \_\_\_\_\_ Model \_\_\_\_\_

Wheelbase \_\_\_\_\_ Cab to Axle \_\_\_\_\_

Vehicle GVWR Recommended by the Aerial Device Manufacturer \_\_\_\_\_ lbs.

GVWR Supplied \_\_\_\_\_ lbs.

Vehicle Front GAWR Recommended by the Aerial Device Manufacturer \_\_\_\_\_ lbs.

Vehicle Rear GAWR Recommended by the Aerial Device Manufacturer \_\_\_\_\_ lbs.

Front GAWR Supplied \_\_\_\_\_ Rear GAWR Supplied \_\_\_\_\_

Front Axle Capacity \_\_\_\_\_ Rear Axle Capacity \_\_\_\_\_

Engine: Make \_\_\_\_\_ Model \_\_\_\_\_

CID \_\_\_\_\_ No. of Cylinders \_\_\_\_\_

SAE Net Horsepower \_\_\_\_\_ @ \_\_\_\_\_ RPM, SAE Net Torque \_\_\_\_\_ @ \_\_\_\_\_ RPM

Governed RPM \_\_\_\_\_

Transmission: Make \_\_\_\_\_ Model \_\_\_\_\_

Ratios \_\_\_\_\_ No. of Speeds Forward \_\_\_\_\_ Reverse \_\_\_\_\_

Rear Axle:

Make \_\_\_\_\_ Model \_\_\_\_\_

Ratios \_\_\_\_\_

Tire Size: Front \_\_\_\_\_ Rear \_\_\_\_\_

Ply Rating: Front \_\_\_\_\_ Rear \_\_\_\_\_

Rim: Size \_\_\_\_\_ Type \_\_\_\_\_

Hour meter: Make \_\_\_\_\_ Model \_\_\_\_\_

Minimum Frame Section Modulus recommended by Aerial Device Manufacturer \_\_\_\_\_

Frame Section Modulus with reinforcement to be provided \_\_\_\_\_

Type Reinforcement \_\_\_\_\_

Vehicle Frame Resistance Bending Moment (RBM) Recommended by the Aerial Device Manufacturer \_\_\_\_\_

Vehicle Frame RBM to be Provided \_\_\_\_\_

Manufacturer's recommended overhaul/dielectric test intervals \_\_\_\_\_

Power Take-off Recommended by Aerial Device Manufacturer:

Make \_\_\_\_\_ Model \_\_\_\_\_ No. of Speeds \_\_\_\_\_

Power Take-off Provided:

Make \_\_\_\_\_ Model \_\_\_\_\_ No. of Speeds \_\_\_\_\_

% of Engine RPM at which the PTO will operate \_\_\_\_\_

Utility Body Make \_\_\_\_\_ Model \_\_\_\_\_

Length \_\_\_\_\_ Width \_\_\_\_\_ Height \_\_\_\_\_

Specification: Aerial Lift

Aerial Device: Make \_\_\_\_\_ Model \_\_\_\_\_

Bucket Height \_\_\_\_\_ Reach at Horizontal \_\_\_\_\_

Lower Boom Insulation \_\_\_\_\_ Upper Boom Insulation \_\_\_\_\_

Maximum outrigger spread at full extension \_\_\_\_\_

Warning Lamp: Make \_\_\_\_\_ Model \_\_\_\_\_

It is understood that final actual rated capacity and static load capability of the units cannot be provided until complete assembly and testing of truck body and aerial device. However, based on the procedures contained in ANSI A92.2 - 2001 and the manufacturer's data, estimates of the capability of the units as described in the specifications shall be provided. Also, estimates of the axle loadings shall be provided. Estimated Total Operating Weight including truck, fuel, operating, body, device ballast and other equipment as specified is \_\_\_\_\_ pounds.

Estimated weight of Ballast is \_\_\_\_\_ pounds.

Estimated rated capacity of aerial device is \_\_\_\_\_ pounds.

Estimated Static Load capacity with outriggers extended on level ground is \_\_\_\_\_ pounds.

Estimated Static Load capability on a five degree slope with outriggers extended is \_\_\_\_\_ pounds.

Boom position for extreme critical loading effect on vehicle is \_\_\_\_\_

\_\_\_\_\_

Estimated Front Axle loaded weight in position outlined in 6 above under maximum rated load with outriggers is \_\_\_\_\_ pounds.

Estimated Rear axle loaded weight in position outlined in 6 above under maximum rated load with outriggers \_\_\_\_\_ pounds.

Estimated Front axle loaded weight in the transport position is \_\_\_\_\_ pounds.

Estimated Rear axle loaded weight in the transport position is \_\_\_\_\_ pounds.

Warranty Period \_\_\_\_\_ months.

**Name and address of firm nearest the FOB point that will provide warranty service and repair parts.**

Firm Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_ Individual to Contact \_\_\_\_\_

If the servicing dealer furnishes parts for minor repairs performed by STATE personnel, will this affect the warranty? \_\_\_\_\_.  
If answer is "yes" please attach explanation.

Name of Firm \_\_\_\_\_ Bidder's Signature \_\_\_\_\_

Bidder's Telephone No. \_\_\_\_\_ Print or Type Bidder's Name \_\_\_\_\_